

## **REMARKS**

### **I. Claim Status**

Claims 1-13 are pending and at issue in the present application.

Claim 13 has been amended to recite  $\alpha$ -starch in the outer skin layer. Support for the present amendment is found in the specification at page 4, last full paragraph and page 5, second paragraph. No new matter has been added.

### **II. Objections to the Specification**

The Examiner has objected to the specification as allegedly failing to provide a proper antecedent basis for the term "pregelatinized starch" in claim 13. Without conceding the correctness of the Examiner's rejection, claim 13 has been amended to recite  $\alpha$ -starch in the outer layer of the particle. The use of the term " $\alpha$ -starch" in claim 13 is supported in the specification at page 4, last full paragraph and page 5, second paragraph. Therefore, the specification provides antecedent basis for all of the currently pending claims, including claim 13. Accordingly, the present objection should be withdrawn.

### **III. Claim Rejections**

A. Rejections under 35 U.S.C. §103(a): The Examiner has rejected claims 1-5 and 7-13 as obvious over Sasahara (Japanese Patent Publication No. 11-032608) in view of McPherson et al. (U.S. Patent No. 6,405,677, "McPherson"). Sasahara discloses a two-layer particle having an inner core

composed of wood fibers and an outer skin composed of fibrous powder and an absorbent polymer. McPherson is cited by the Examiner as disclosing a litter particle comprising  $\alpha$ -starch. Although the Examiner acknowledges that McPherson does not teach the use of  $\alpha$ -starch in a two layer particle, as presently claimed, the Examiner maintains that it would have been obvious to combine the teachings of McPherson with those of Sasahara to arrive at the present invention. (See Office Action, p. 2, ¶ 3).

The rejection is respectfully traversed and reconsideration is requested.

Claims 1-5 and 7-13 are not obvious over Sasahara in view of McPherson for two reasons: (1) modification of Sasahara, as suggested by the Examiner, would render the prior art invention unsatisfactory for its intended purpose, and (2) mere awareness in the art is not sufficient to establish obviousness.

First, Sasahara teaches the use of a water absorbing polymer in its outer layer for purposes of facilitating the transfer of water between the surface and the inner core of the particle. (See Sasahara p. 6, ll. 9-13). The water absorbing polymer of Sasahara also works to *prevent* the particle from deforming. Use of a water soluble polymer, such as  $\alpha$ -starch, in the outer layer of Sasahara would render Sasahara's invention inoperable, because the  $\alpha$ -starch would solubilize in the presence of water and would not promote the transfer of water from the outer to the inner layer. Additionally, the use of  $\alpha$ -starch in Sasahara's outer layer would work to actively deform the Sasahara particle, in direct contrast to the function of Sasahara's water absorbing polymer, because when the presently claimed particles

are exposed to water, the outer layer  $\alpha$ -starch actively deforms the particle in order to promote interparticle cohesion. (See Specification, p. 4, ¶ 9).

Consequently, if Sasahara were modified to incorporate  $\alpha$ -starch in its outer layer, as suggested by the Examiner, the invention would be rendered unsatisfactory for its intended purpose. The Examiner is respectfully reminded that where a proposed modification would render the prior art invention unsatisfactory for its intended purpose, the reference cannot provide the basis for an obviousness rejection, as there would have been no motivation to make the proposed modification. See *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984); MPEP § 2143.01.

McPherson does not cure the deficiencies of Sasahara because McPherson would not have provided the necessary motivation to combine the use of  $\alpha$ -starch with the teachings of Sasahara. McPherson teaches away from the use of  $\alpha$ -starch and specifically states that unmodified starch is preferable to modified starch (such as  $\alpha$ -starch) for purposes of promoting interparticle cohesion. (See McPherson Col. 4, ll. 64-67). The Examiner is respectfully reminded that where a reference teaches away from the claimed invention, that reference cannot be combined to render the claimed invention obvious. See *In re Crasselli*, 713 F.2d 731 (Fed. Cir. 1983); MPEP § 2145. Here, McPherson would more likely discourage a person of ordinary skill from using  $\alpha$ -starch either alone or in combination with Sasahara, as suggested by the Examiner. See *Gillette Co. v. S.C. Johnson & Son, Inc.*, 919 F.2d 720 (Fed. Cir. 1990) (finding non-obviousness where “[t]he closest prior art reference ‘would likely *discourage* the art worker from attempting the substitution suggested by [the

inventor/patentee]’” (emphasis in original)). Therefore, Sasahara and McPherson, either alone or in combination, cannot be relied upon to reject claims 1-5 and 7-13 as obvious.

Second, Applicants respectfully assert that mere awareness in the art is not enough to prove obviousness. See *Micro Chemical, Inc. v. Great Plains Chemical Co., Inc.*, 103 F.3d 1538 (Fed. Cir. 1997) (“A determination of obviousness must involve more than indiscriminately combining prior art; a motivation or suggestion to combine must exist.”). In other words, obviousness can only be established where there is some teaching, suggestion or motivation in the prior art that would have led a person of ordinary skill to combine or modify the references. *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376 (Fed. Cir. 2001). The Examiner states that McPherson “is merely cited for showing that in prior art litters, the use of a pregelatinized starch is known and therefore would be a known material to those having ordinary skill in the art.” (Office Action, p. 2, ¶ 4). Such a general citation, in which the reference not only lacks the proper motivation, but also, in fact, teaches away from the claimed invention, is not sufficient to support a rejection for obviousness. A person of ordinary skill would not have been motivated to combine McPherson’s use of a modified starch (e.g.,  $\alpha$ -starch) with any other reference, let alone Sasahara in order to achieve the present invention. In view of the above arguments, Sasahara and McPherson, either alone or in combination, cannot be relied upon to reject claims 1-5 and 7-13 as obvious. Therefore, this rejection should be withdrawn.

The Examiner has rejected claim 6 as obvious over Sasahara in view of McPherson, and further in view of Chikazawa (U.S. Patent No. 5,209,185). The Examiner admits that "Chikazawa does not disclose tapioca being an  $\alpha$ -starch" (Office Action, p. 3, ¶ 5), and that Chikazawa "was merely relied upon to show that tapioca is a known starch in the art of animal litters. As such, it is considered to be within the skill of an artisan in the art to look towards tapioca when determining a starch to pre-gelatinize for use in litters." (Office Action, p. 3, ¶ 5). Nevertheless, the Examiner contends that it would have been obvious to have modified tapioca starch into tapioca  $\alpha$ -starch in view of Chikazawa.

The rejection is respectfully traversed and reconsideration is requested.

Chikazawa teaches the use of tapioca as an absorbent material, but does not teach or suggest the use of tapioca  $\alpha$ -starch. (See Chikazawa, Col. 2, ll. 56-64). Thus, a person of ordinary skill would not have known to use  $\alpha$ -starch, a modified starch, in particular. Moreover, Chikazawa does not teach or suggest the use of tapioca in combination with fibers in an outer skin layer of a two-layer particle. Rather, Chikazawa teaches the use of tapioca alone in a single-component particle. Thus, there is no disclosure in Chikazawa that would have motivated a person of ordinary skill to modify Chikazawa's tapioca starch into  $\alpha$ -starch, apply the  $\alpha$ -starch to a two-layer particle, and then selectively incorporate the  $\alpha$ -starch into the outer layer of the two-layer particle. There is simply no guidance in Chikazawa that would have taught or motivated a person of ordinary skill to have made each of these distinct modifications to, and applications of, the teachings of Chikazawa.

Because there would have been no motivation to combine Sasahara, McPherson and Chikazawa, these references cannot be relied upon to reject claim 6 as obvious. See *Micro Chemical, Inc.*, 103 F.3d 1538; *Karsten Mfg. Corp.*, 242 F.3d 1376. Therefore, this rejection should be withdrawn.

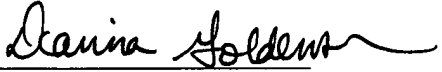
### Conclusion

In view of the above amendments and remarks, it is respectfully requested that the application be reconsidered and that all pending claims be allowed and the case passed to issue.

If there are any other issues remaining, which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

Respectfully submitted,

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